

Invention Disclosure No. ID1999-156Date Received (MMDDYY) 3 2 96Attorney NTRCommittee -P

Above information to be completed by the Patent Department



## Invention Disclosure

Please read and follow the attached instructions.

1. Title or subject of Invention:

Thermoplastic Snap-on Style Air Spring  
Upper Retainer w/ Integral Mounting  
Attachment, Quick-connect Air and Bumper  
Provisions.

2. Purpose/detailed description of Invention:

Provide a light weight, low cost means of  
easily attaching the air supply end of an  
Air Bag directly to a suspension frame  
rail using materials which do not corrode.

3. Commercial Utility:

The majority of truck rear axle air suspensions  
in production today could utilize this technology  
and benefit from the reduced cost (savings in  
purchase price and reduced installation time)  
and  
weight without having to concern themselves with  
corrosion protection.

4. Differences from or advantages over prior art:

A SUB-ASSEMBLY MADE FROM COATED STEEL STAMPINGS AND PLUMBING COMPONENTS IS THE CURRENT APPROACH TO ACHIEVE MOUNTING ATTACHMENT, AIR CONNECTION AND BEAD CAPTIVATION. THE PROPOSED SINGLE MOLDED PART APPROACH DOESN'T ATTEMPT TO CAPTURE THE BEAD BUT RATHER RELIES

5. Important dates:

- a) Conception: Date 9/3/97 Ref. ATTACHMENT SKETCH
- b) First Written description, sketch, or drawing: Date 9/3/97 Ref. ATTACHED SKETCH (CAO FILE)
- c) First use: Date 11/18 Ref. \_\_\_\_\_

6. Inventor(s): Name Userid Phone Extension Dept

- a) MARSH TROMBES J109862 330-896-5013 021  
b) \_\_\_\_\_  
c) \_\_\_\_\_  
d) \_\_\_\_\_  
e) \_\_\_\_\_

7. Contribution of each Inventor:

- a) CONCEPT & DESIGN  
\_\_\_\_\_  
b) \_\_\_\_\_  
\_\_\_\_\_  
c) \_\_\_\_\_  
\_\_\_\_\_  
d) \_\_\_\_\_  
\_\_\_\_\_  
e) \_\_\_\_\_  
\_\_\_\_\_

THE INTERFERENCE FIT BETWEEN THE MOLDED PART  
AND THE BEAD OF THE AIR BAG TO EFFECT A SEAL.  
A BARB IS PROVIDED TO PREVENT DISENGAGEMENT UNDER  
CERTAIN LOW PRESSURE OPERATIONS.

8. Department Manager:

Name: Robert Schissler

Userid/location T476 B&E / GREENSB1

Phone 896-5026

Dept No. 021 (Green)

9. Immediate Supervisor, if applicable:

Name: \_\_\_\_\_

Userid/location \_\_\_\_\_

Phone \_\_\_\_\_

Dept No. \_\_\_\_\_

10. Attachments (yes/no) -- if yes, please list:

COPY OF PRINT FROM ORIGINAL CAO FILE.

\_\_\_\_\_  
\_\_\_\_\_

11. Forms submitted by:

Name: MARK TROWBRIDGE

Userid/location T109E62

Phone 330-896-5013

Dept No. 021

1/26/98  
M.T.  
5:13

Mark Trowbridge 2/2/98

Signature

Date

Note: Use additional sheets if necessary for any of the above and set forth on each sheet "sheet \_\_\_\_ of \_\_\_\_ (fill in appropriate sheet numbers).

Upon completion of the above items, please forward to your Manager who will complete the "Manager's Checklist" portion of this Invention Disclosure and will forward it to the Patent & Trademark Department.

